

DOCKET NO: 278057US0PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: :
OLIVER SEEGER ET AL : EXAMINER: LE, HOA T.
SERIAL NO.: 10/551,434 :
FILED: SEPTEMBER 29, 2005 : GROUP ART UNIT: 1773
FOR: USE OF COATED METALLIC :
LUSTER PIGMENTS FOR PIGMENTING
HIGH MOLECULAR WEIGHT
MATERIALS

SUPPLEMENTAL RESPONSE

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Supplemental to the Amendment filed October 9, 2007, please consider the following further comments.

In the October 9, 2007 Amendment, Applicants argued that U.S. Patent No. 5,607,504 to Schmid et al. ("Schmid") and WO 99/35194 to Coulter et al. ("Coulter") fail to disclose or suggest the pigment of claim 1 of the above-identified patent application. Applicants provide the following further comments in that regard.

Claim 1 recites "[a] silver-colored pigment for pigmenting macromolecular materials, comprising: a platelet-shaped aluminum substrate; and a coating provided on all sides of the aluminum substrate; wherein the coating consists of: a low refractive dielectric layer that does not absorb visible light, the layer consisting essentially of at least one of silicon dioxide and silicon oxide hydrate and having a thickness of from 250 to 450 nm; and an optional

colorless outside layer comprising a surface-modifying agent that enhances compatibility of the pigment with the macromolecular materials" (emphasis added).

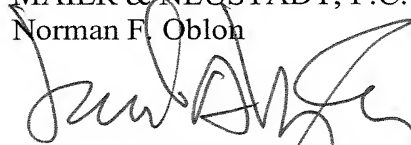
In the October 9, 2007 Amendment, Applicants argued that Schmid and Coulter fail to disclose or suggest a pigment having a low refractive layer having a thickness of from 250 to 450 nm. Applicants have conducted some experimentation to demonstrate that providing a pigment having a low refractive layer as recited in claim 1, the layer having a thickness of from 250 to 450 nm, would not have been obvious over Schmid and Coulter. The results of this experimentation are set forth in the Declaration Under 37 C.F.R. §1.132 ("Declaration") filed herewith. In particular, multiple Example pigments and Comparative Example pigments were prepared and evaluated. *See* Declaration, paragraph 7. The Example pigments included different aluminum pigments having SiO₂ coatings of varying thicknesses. *See* Declaration, paragraph 7. The Comparative Example pigments included different aluminum pigments without coatings. *See* Declaration, paragraph 7. The Example pigments and Comparative Example pigments were each incorporated into a plastic plaque, and the plaques were evaluated for metallic effect (ME). *See* Declaration, paragraph 7. The obtained ME values were normalized for the aluminum content of the respective pigments, and the normalized ME values compared with reference to the SiO₂ coating thicknesses of the respective pigments. *See* Declaration, paragraph 7, TABLE, GRAPH. The obtained data demonstrates that providing a silver-colored pigment including a platelet-shaped aluminum substrate and a coating of at least one of silicon dioxide and silicon oxide hydrate of a particular thickness, as set forth in claim 1, yields superior performance. *See* Declaration, paragraph 8. In particular, aluminum pigments having coatings with thicknesses of from 250 to 450 nm provide a superior metallic effect, when normalized for aluminum content, relative to aluminum pigments having coatings having thicknesses outside of the range recited in claim 1. *See* Declaration, paragraph 8, TABLE, GRAPH.

The experimental results set forth in the Declaration are objective evidence of the non-obviousness of the pigment of claim 1 over pigments as in Schmid and Coulter, and thus these results rebut any suggestion that it would have been obvious to modify the pigments of Schmid and Coulter as proposed in the Office Action.

For the foregoing further reasons, Applicants submit that claims 1-3, 8 and 9 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

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Attachment:
Declaration Under 37 C.F.R. §1.132